

REMARKS

ALLOWABLE SUBJECT MATTER

Applicant appreciatively acknowledges the Examiner's identification of claims 44, 46, 49, 50, and 53 as reciting allowable subject matter and noting that the claims would be patentable if rewritten in independent form.

CANCELED CLAIMS

Claim 32 is canceled because, as the Examiner noted in the Office Action, it did not further limit the scope of claim 30, from which it depended. Claim 44 is canceled and its limitations are incorporated into claim 41. Claim 49 is canceled and its limitations are incorporated into claim 45. Claim 50 is canceled because it does not further limit claim 45, as amended.

CLAIM AMENDMENTS

Claim 30 - In response to the rejection of claim 30 as indefinite under 35 U.S.C. §112, second paragraph, claim 30 is amended to recite:

A method for signal reconstruction comprising: receiving an input waveform **including** a frequency modulated carrier waveform and frequency modulated carrier frequency, **said input waveform comprising sample points**; demodulating the frequency modulated carrier waveform to obtain a speed variation function; integrating the speed variation function to obtain a time delay corresponding to at least one sample point of the input waveform; **wherein if a time delay exists, the sample point is irregular and if a time delay does not exist, the sample point is regular; interpolating between irregular sample points of the input waveform, and not interpolating between regular sample points of the input waveform**, thereby establishing a set of output sample **points** at a regular interval. [Emphasis added].

The Examiner asks whether one signal is received or if three signals are received. It is one signal, the input waveform, that is received, but it has subcomponents. The frequency modulated carrier waveform and frequency modulated carrier frequency are **included** within the input waveform. In other words, the frequency modulated carrier waveform and frequency modulated carrier frequency are parts of the input waveform. The frequency modulated carrier frequency represents the instantaneous frequency of the frequency modulated carrier waveform. Applicant respectfully directs the Examiner to the application, as published, at paragraphs [0017]-[0020], [0022], [0025], [0027], [0069] - [0085], and especially at [0076].

Further, the claim recites "a time delay" instead of "**the** time delay" in order to correct the lack of antecedent basis. Also, the lack of antecedent basis for the

sample points of the waveform is now addressed by the recitation of “**said input waveform comprising sample points.**” Additionally, the determination of whether sample points are regular or irregular is recited, as well as the actions taken for both regular and irregular sample points. The part of claim 30 directed to this is: “**wherein if a time delay exists, the sample point is irregular and if a time delay does not exist, the sample point is regular; interpolating between irregular sample points of the input waveform, and not interpolating between regular sample points of the input waveform.**” Finally, for consistency in the language, the claim now recites “set of output sample points” instead of “set of output samples.”

Claim 34 - In response to the rejection of claim 34 as indefinite under 35 U.S.C. §112, second paragraph, claim 34 is amended to recite, in pertinent part:

“...said demodulation performed using software.”

The amendment removes the word “either” which previously appeared before the word “software.”

Claim 41 – This claim is amended to incorporate the limitations of claim 44, which the Examiner said recited allowable subject matter. Claim 41 now recites, in pertinent part:

“...adjusting timing and pitch in the digitized wideband playback signal in response to the deduced periodic deviations, **wherein such adjusting comprises establishing a limit in a change in a period of the reference signal, and if the change in the period exceeds the limit, separately conforming the synchronization of the digitized wideband playback signal to the stabilized carrier at a time of the recording which occurs after the change, thereby separately adjusting the synchronization before and after the change,** thereby producing a wideband playback signal substantially corrected for distortion corresponding to said wow/flutter.” [Emphasis added].

Claim 45 – This claim is also amended to incorporate the limitations of a claim that the Examiner deemed to recite allowable subject matter. Here, the limitations of claim 49 are incorporated into claim 45. Claim 45 now recites, in pertinent part:

“...adjusting timing and pitch in the digitized wideband playback signal in response to the deduced periodic deviations, **wherein such adjusting comprises establishing a limit in a change in a period of the signal corresponding to the reference signal, and if the change in the period exceeds the limit, separately conforming the synchronization of the wideband playback signal in digital form to the stabilized signal corresponding to the reference signal at a time of the digital recording which occurs after the change, thereby separately adjusting the synchronization before and after the change,** thereby producing a wideband playback signal substantially corrected for distortion corresponding to said wow/flutter.” [Emphasis added].

ARGUMENTS

Claims 30 and 32-36 are rejected under 35 U.S.C § 102(e) as being anticipated by U.S. 6,603,820 to De Mey et al. (hereinafter “De Mey”).

As discussed above, claim 30 is amended to address an indefiniteness rejection under 35 U.S.C. § 112. Claim 30 now recites, in pertinent part:

“...wherein if a time delay exists, the sample point is irregular and if a time delay does not exist, the sample point is regular; **interpolating between irregular sample points of the input waveform, and not interpolating between regular sample points of the input waveform**, thereby establishing a set of output sample points at a regular interval.” [Emphasis added].

Previously, the Examiner did not consider the limitation in the previous version of the claim directed towards interpolating between irregular sample points, because the Examiner interpreted the limitation to be “a conditional limitation, wherein there is no case.” As shown above, and as discussed previously, claim 30 now recites the actions taken for both irregular and regular sample points of the input waveform, specifically: “**interpolating between irregular sample points of the input waveform and not interpolating between regular sample points of the input waveform.**” Applicant submits that De Mey does not disclose this limitation and that the Examiner should give weight to the limitation, as amended in this Response. De May does not even mention “**interpolation.**” For at least this reason, claim 30, as amended, is patentable over De Mey. Further, given that claims 32-36 depend from claim 30, they too are patentable.

Claim 31 is rejected under 35 U.S.C. 103(a) as obvious over De Mey in view of U.S. 5,218,486 to Wilkinson (hereinafter “Wilkinson”). However, since claim 31 depends from claim 30, which has been shown to be patentable, claim 31 is also patentable.

Claims 41-43, 51, and 52 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. 4,353,089 to Winslow et al. (hereinafter “Winslow”), though the Examiner seems to refer to Winslow as “Schwartz et al.” in the rejection of claim 41.

As discussed previously, claim 41 is amended to include the limitations of claim 44, which the Examiner deemed to recite allowable subject matter. Claim 41 now recites, in pertinent part:

“...adjusting timing and pitch in the digitized wideband playback signal in response to the deduced periodic deviations, **wherein said adjusting comprises establishing a limit in a change in a period of the reference signal, and if the change in the period exceeds the limit, separately conforming the synchronization of the digitized wideband playback signal to the stabilized carrier at a time of the recording which occurs after the change, thereby separately adjusting the synchronization before**

and after the change, thereby producing a wideband playback signal substantially corrected for distortion corresponding to said wow/flutter.” **[Emphasis added]**.

Correspondingly, claim 41 should now be allowable. Further, given that claims 42, 43, 51, and 52 depend, directly or indirectly, from claim 41, they too should now be patentable.

Claims 45, 47, and 48 are also rejected under 35 U.S.C. § 102(b) as being anticipated by Winslow. However, claim 45 is amended to include the limitations of claim 49, which the Examiner deemed to recite allowable subject matter. Claim 45 now recites, in pertinent part:

“...adjusting timing and pitch in the digitized wideband playback signal in response to the deduced periodic deviations, **wherein such adjusting comprises establishing a limit in a change in a period of the signal corresponding to the reference signal, and if the change in the period exceeds the limit, separately conforming the synchronization of the wideband playback signal in digital form to the stabilized signal corresponding to the reference signal at a time of the digital recording which occurs after the change, thereby separately adjusting the synchronization before and after the change**, thereby producing a wideband playback signal substantially corrected for distortion corresponding to said wow/flutter.” **[Emphasis added]**.

Accordingly, claim 45 should be allowable. Additionally, given that claims 47 and 48 depend from claim 45, they should also be allowable.

GRAMMY AWARD

To underscore the novelty, non-obviousness, and utility of the subject matter claimed in this patent application, Applicant points out that named inventor, James (“Jamie”) Howarth, received a Grammy for “Best Historical Album” for remastering “The Live Wire - Woody Guthrie In Performance 1949” using the claimed subject matter. Simply visit http://www.grammy.com/GRAMMY_Awards/Winners/ and enter “Howarth” in the “Artist” field for evidence of this fact.

CONCLUSION

The Applicant believes this to be a complete response to the Office Action of April 2, 2009. For the reasons presented in this response, the Applicant asserts that the claims as shown in the present Listing of the Claims are each patentable. Accordingly, prompt notice of allowance is respectfully requested. If there are any questions, the Examiner is invited to phone the Applicant’s undersigned attorneys.

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Respectfully submitted:

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